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August 29, 1997

EDWARD A. YORKGITIS, JR.
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William F. Caton, Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: *Ex Parte* Presentation
CC Docket No. 96-98
Response to July 31, 1997, Request for Information re "Code Opening" Fees

Dear Mr. Caton:

Yesterday afternoon, August 28, 1997, David Gamble, Vice President Regulatory Affairs of Paging Network, Inc. ("PageNet"), William Wiginton, Pagenet's Director of Interconnection, and the undersigned, Edward A. Yorkgitis, Jr., of Kelley Drye & Warren, representing PageNet, met with Greg Cooke and Renee Alexander of the Network Services Division ("Division") of the Common Carrier Bureau to discuss the Division's July 31, 1997, Request for Information ("RFI") regarding "Code Opening" and other number-related fees. (Messrs. Gamble and Wiginton attended the meeting via telephone.) The substance of what was discussed in the meeting is presented below and in Attachment 1, hereto.[1] This letter also represents a written, more comprehensive response to the RFI.

[1] Attachment 1 is a slightly modified version of the Representative Number Charges chart passed out at the meeting. It has been revised to reflect clarifications provided during the discussion with the Division's staff.

I. INTRODUCTION AND BACKGROUND

PageNet recognizes that the RFI focused on charges for whole NXX codes. However, given the reality that historically, NXX codes have not always been available to paging carriers — and in some locations still are not available today — as described more fully below, it is critical for the Division to include within the scope of its examination the charges assessed when paging carriers obtain numbers for their subscribers through DID number blocks, or "partial NXX codes." Indeed, as explained later, PageNet's review of its records in response to the RFI indicates that, on at least one occasion, an incumbent local exchange carrier ("ILEC") has assessed substantial recurring and nonrecurring charges for an entire NXX code assigned to PageNet on a 100-number block-by-block basis.

For many years, NXX codes were not made available to paging carriers. This lack of availability was directly tied to the refusal of ILECs to provide paging carriers with the option of interconnecting the paging switch to the ILEC tandem office (often referred to as Type 2 interconnection). Relegated to "lineside" connections at the ILEC end office (often referred to as Type 1 interconnection), paging carriers were forced to obtain DID numbers, typically in blocks of 100 numbers, to satisfy their growing needs for numbers. As a result, many networking decisions as PageNet developed its national infrastructure were driven by the unavailability of Type 2 interconnection. Even today, a number of carriers, particularly the smaller independents, do not make Type 2 interconnection available or seek to charge exorbitant rates.[2] PageNet and other paging carriers still make extensive use of Type 1 interconnection as a direct result of their initial system configurations and, consequently, blocks of DID numbers.

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[2] Section 51.703(b) of the Commissions Rules, 47 C.F.R. § 51.703(b), makes it unlawful for LECs to charge paging carriers and other commercial mobile radio service ("CMRS") providers for the delivery of LEC-originated traffic to CMRS carriers for termination. Accordingly, charges for Type 2 (or Type 1) facilities between paging carriers and LECs are *per se* unlawful where all of the traffic carried on them is LEC-originated.

As Type 2 interconnection became available to paging carriers,[3] in many cases PageNet would endeavor to obtain whole NXX codes. This occurred particularly in some large urban markets. In other areas, including smaller towns and more sparsely populated areas, however, PageNet often could not justify taking entire codes. This was done, in part, because the ILECs were charging thousands of dollars in nonrecurring charges as well as substantial amounts on a monthly basis for a single NXX code. Moreover, Type 2 interconnection charges were often extremely high relative to Type 1 fees. The more economically justifiable solution where only several hundred or a few thousand numbers might be needed, therefore, was to obtain DID numbers, or partial NXX codes.

In addition to these two factors — the historical unavailability of Type 2 interconnection and, where Type 2 was available, the unreasonably high NXX code charges — the increasing need for area code relief contributes to paging carriers' use of partial NXX codes. Specifically, under code conservation measures frequently adopted, it becomes increasingly difficult (prior to the availability of the new area code) for carriers to obtain NXX codes. This is particularly the case for paging and other wireless carriers, despite the fact that they are often the most efficient users of numbering resources.[4] In many states, code conservation measures allow the assignment of only a limited number of NXX codes each month where NPA codes are in jeopardy status.[5] Faced with pending number shortages, paging carriers, therefore, may have little choice but to take blocks of DID

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[3] In contrast with Type 1 arrangements, Type 2 connections are achieved principally using T1 and higher capacity trunks between the ILEC tandem and the switch. For present purposes, the most significant difference between Type 1 and Type 2 interconnection is that Type 1 connections typically are associated with blocks of 100 or 1000 numbers routed through the ILEC end office. These partial NXX codes are assigned by the ILEC to other carriers from codes that originally were assigned to the ILEC and reside in its end office. Whole NXX codes assigned to PageNet are routed through the tandem.

[4] On average, PageNet understands that it, and the wireless industry in general, utilize a materially higher percentage of the numbers in NXX codes assigned to them than wireline carriers.

[5] Often the codes made available are assigned in monthly lotteries that set aside a significant fraction of the NXX codes for carriers that do not have NXX codes in some of the rate centers within the NPA territory. This unreasonably advantages new wireline entrants over wireless carriers who typically do not have a presence in each rate center, although they serve the entire NPA territory. As a result, paging carriers with an existing NXX code in the NPA territory often do not qualify for the "initial codes" but must compete with other carriers for the few remaining "growth" NXX codes.

numbers to continue to serve their customers.[6] In such circumstances, without strong oversight from regulators, paging carriers are thus at the mercy of the ILECs regarding number-related charges.

In sum, given paging carriers' historical and current (and often forced) reliance on partial NXX codes, as well as their continued need for entire NXX codes, PageNet urges the Division and the Commission to look closely at any alleged justification by the ILECs for charges for both entire NXX codes as well as blocks of DID numbers. PageNet submits that there is no justification for the charges currently being assessed, as explained in Section II. In Section III, PageNet provides its answers and data in response to the RFI on charges for both partial and whole NXX codes.

II. The Commission Must Affirm Its Prohibition Against Unjust, Unreasonable, and Discriminatory Charges for Numbers

In its *Second Report and Order* in CC Docket No. 96-98, the Commission prohibited ILECs "from assessing unjust, discriminatory, or unreasonable charges for activating CO codes on any carrier or group of carriers."[7] PageNet and others had demonstrated that ILECs were charging unjust and unreasonable fees for code activation and/or opening.[8] As PageNet illustrates in Attachment 1, similar charges are still being assessed by many ILECs today.

The code opening fees assessed when PageNet receives a whole NXX code ostensibly are functions that must be performed by all carriers to allow their customers to originate calls to numbers using the new NXX code, as detailed below. These should be treated as a cost of doing business. Certainly the exorbitant NXX code opening fees that have been assessed on PageNet are *per se* unreasonable, and adversely affect its competitive position.

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[6] Nonetheless, use of partial NXX codes can help to preserve scarce numbering resources.

[7] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 11 FCC Rcd 19,392, 19,538 (1996)("Second Report and Order") *vacated in part sub nom. People of the State of California v. FCC*, No. 96-3519 *et al.*, slip op. (8th Cir. August 22, 1997).

[8] For example, Attachment 2 hereto is a chart PageNet submitted with its March 4, 1996, Comments in CC Docket No. 95-185, which reflects representative charges being assessed as of March 1, 1996, for NXX code opening/activation and partial NXX codes.

Moreover, the functions associated with partial NXX code activations or DID numbers are minimal. Indeed, as noted below, a translation table can be updated for the entire range of numbers in a DID block (or contiguous DID blocks) simultaneously.[9] Recurring costs are negligible to non-existent. In fact, the partial code assignee, not the ILEC, must input numbers individually in its switch. Thus, the charges ILECs are assessing for partial code activation and maintenance are so high relative to any measure of reasonable costs for these functions that these charges essentially represent fees for numbers. The Commission made clear in the *Second Report and Order* that ILECs could not assess recurring charges "solely for the use of numbers."[10] Thus, these charges for partial code activation are unreasonable and impermissible. Similarly, recurring charges for entire NXX codes are purportedly for functions that are negligible to non-existent and, thus, constitute unjust and unreasonable rates.

The *Second Report and Order* also explained that, to the extent number-related charges represent charges for interconnection, they are governed by the *First Report and Order* in CC Docket No. 96-68.[11] PageNet submits that, to the extent recurring charges are not impermissible numbers charges, they are impermissible interconnection charges for the delivery of LEC-originated traffic. *See* 47 CFR § 51.703(b).[12] Section 51.703(b) of the Commission's rules prohibits LEC charges to CMRS providers for the delivery of LEC-originated traffic. Any recurring charges for whole or partial NXX codes, to the extent they

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[9] The unreasonableness of the charges for partial code activation is highlighted by the fact that the same level of activity is required for an ILEC to modify the translations for a *single* block of 100 numbers as for *ten, twenty, or one hundred* blocks of 100 numbers, provided the blocks are contiguous. (Typically, in PageNet's experience, when multiple blocks are obtained, they *are* contiguous.) In other words, because an ILEC can update the translation tables for an *entire range of numbers* in one operation, it can update the table for numbers NXX-0001 to NXX-2000 just as efficiently as for numbers NXX-0001 to NXX-0100. Thus, assuming *arguendo* some nominal charge could be justified for partial code activations, there is simply no justification for different charges for contiguous blocks of numbers of different sizes.

[10] *See Second Report and Order*, 11 FCC Rcd at 19,538.

[11] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 11 FCC Rcd 15,499, (1996) *vacated in part sub nom. Iowa Utilities Board v. FCC*, No. 96-3321, *et al.*, slip op. (8th Cir. July 18, 1997).

[12] In *Iowa Utilities Board, supra,* the Eighth Circuit upheld Section 51.703(b) with respect to CMRS-LEC interconnection.

relate to any ongoing activity, as explained below, relate to the maintenance of routing tables that allow LECs to route and deliver their subscribers' originating traffic to paging carriers. Thus, these recurring charges are unlawful, and the Commission should direct those carriers still assessing them to stop immediately.

Moreover, it is PageNet's understanding that many of these charges are not being assessed on all carriers equally. Rather, to PageNet's knowledge, in many cases these charges are being discriminatorily assessed only against wireless carriers or, more particularly, paging carriers. The Commission should affirm that such discriminatory application of charges for whole, or partial, NXX codes is unlawful.

In short, PageNet urges the Commission to affirm that ILECs must cease to assess all current costs for code activation and opening, nonrecurring as well as recurring.

III. Responses to Division's RFI

PageNet's responses to the RFI are as follows:

A. Definitions and Comparisons:

1. Define and distinguish the terms [a] "assignment of CO codes," [b] "activation of CO codes," and [c] "CO code opening."

2a) List and define the functions associated with CO code assignment.

3a) List and define the functions associated with CO code activation.

4a) List and define the functions associated with CO code opening.

1a, 2a) Code Assignment. Central office code *assignment* is performed for requesting carriers by the code administrator for the relevant area. Most often this has been and, in the short run, will continue to be performed by an RBOC or other major ILEC operating within the geographic territory of the area code. This function will be assumed by the independent North American Numbering Plan Administrator in the near future. Code assignment applies to *whole* NXX codes, not to partial NXX codes. The code administrator is not involved in the "opening" or "activation" of NXX codes, including partial codes; rather, these functions are performed by the code assignee or, in the case of code opening, by all carriers that may be routing traffic to numbers in the code at issue, as discussed below.

Briefly, the assignment functions performed by the CO code administrator are as follows:[13] The administrator receives, evaluates and processes CO code applications from requesting carriers. When an application is granted, a code must be selected and records must be both created and maintained, including the Local Exchange Routing Guide ("LERG"), the Routing Database System ("RDBS") and the Bellcore Routing Input Database System ("BRIDS"). Code assignment may also involve the code administrator in trouble shooting problems relating to assignment, such as misrouting and inability to complete calls, as well as notification of Bellcore when exhaustion is imminent.

1b, 3a). Code Activation. After the code is assigned, the assignee performs the functions associated with *activation*. Code activation occurs in the assignee's switch. When the assignee activates the code, it develops and inputs switch and operational support system ("OSS") translations for the new code. Information that must be entered identifies the NXX as a working NXX and, for the central office switch at issue, identifies the code as a "home" code for that switch. Each line number within the code must be input into the Telephone Number table before it can be given to the customer, and routing translations for the new code must be used to update appropriate tables within the switch.[14]

1c, 4a). Code Opening. Code *opening* (sometimes called code *establishment*) involves functions similar to many of those involved with activation that every carrier that can originate traffic in the NPA must undertake when an NXX code is activated by itself or another carrier.[15] Specifically, each carrier must update the translation tables in its own switches within the NPA that are capable of carrying traffic destined for the whole code assignee's central office in which the NXX code resides. This updating is done for the entire NXX code, and need not be updated where the whole code assignee makes a partial code assignment to another carrier. (*See* "Partial NXX Code Activation" below.)

These code opening activities are essential for interconnectivity of local networks. Code opening resounds to the benefit of every carrier originating traffic, and their respective customers, since a "validated" destination NXX is required on every call. Without

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[13] PageNet concurs in the more detailed description of code assignment functions in the August 26, 1997, *ex parte* filed by AirTouch Communications in response to the Division's request for information.

[14] The translation tables convert dialed digits into routing information.

[15] Carriers outside the NPA territory need not update their switch when a new NXX is assigned within the NPA. Their switches are already homed in on the NPA by virtue of the first three numbers of the 10-digit number needed to call outside the area code.

programming the destination NXX into their switches when a new NXX is assigned, these carriers' subscribers would not be able to have their calls delivered to their final destination.

Partial NXX Code Activation. Partial NXX code activation differs from whole code activation in that both the "whole code assignee" and "partial code assignee" are involved. After the entire NXX code is activated by the whole code assignee, blocks of numbers within the code can be activated for other carriers. These partial code assignees typically take these numbers in the form of DID blocks of 100 numbers, often obtaining numerous contiguous blocks simultaneously, consisting of several hundred, or even thousands of, numbers. The whole code assignee inputs translations for the partial code within its switch, allowing calls originated by its own subscribers, as well as those of other carriers, to be delivered to the partial code assignee for termination. When all the numbers in multiple blocks are contiguous (*e.g.*, twenty blocks of one hundred numbers: NXX-0001 to NXX-2000), the whole code assigned can update the translation table for all of the blocks simultaneously. This requires no more additional work than if the whole code assignee updated the table for just one block.

The partial code assignee must input the line numbers on a line-by-line basis into the Telephone Numbers table. Once the partial code is activated, the whole code assignee performs no further work of any consequence. However, the partial code assignee could seek a change in the routing of the traffic to be terminated, in which case the whole code assignee would be called upon to update the translation tables. But this activity is required so that it can continue to deliver traffic originated on its own network to the partial code assignee.[16]

* * *

[16] Any charges therefor are accordingly prohibited. *See* 47 C.F.R. § 51.703(b). There is a minimal amount of ongoing work involved in ensuring the accuracy of the tables and addressing traffic routing problems, but this is to ensure that the whole code assignee can deliver its originating traffic, for which it cannot charge another carrier. *Id.*

In sum, code assignment differs from code activation and opening functions in at least three fundamental ways. First, assignment is performed by the code administrator. Second, unlike code activation and opening, assignment does not include any programming in the switches in the network. Third, code assignment does not require the updating of any translation tables in any telecommunications switches.

Code activation and code opening each involve similar functions. The big difference is that code activation is performed by the whole code assignee in the switch where the NXX is active. Code opening, in contrast, is performed by all carriers whose switches route traffic to the central office serving the whole code assignee, including the whole code assignee.

B. Numbering Charges

The RFI requests information regarding charges being assessed for code assignment, activation, or opening functions. Attachment 1 hereto summarizes the information PageNet has been able to collect to date. The bill pages supporting this data are provided in Attachment 3 hereto.[17]

PageNet has endeavored to determine what functions the listed charges are intended to cover, with little success. This is only complicated by the fact that minimal detail is provided on the bill pages themselves, as a review of Attachment 3 illustrates. Thus for example, it is not clear whether some charges are purported to cover ILEC functions related to code activation, opening, or both.

2b) Identify the fees charged by incumbent LECs for each of the functions associated with CO code assignment.

Code assignment is performed by the code administrator. To PageNet's knowledge, there are no charges expressly assessed for these functions.

3b) Identify the fees charged by incumbent LECs for each of the functions associated with CO code activation.

4b) Identify the fees charged by incumbent LECs for each of the functions associated with CO code opening.

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[17] Attachment 3 is being submitted under separate cover and pursuant to a request for confidentiality.

As explained above, code activation of whole NXX codes by the whole code assignee is a function performed for itself, and thus there should be no fee. PageNet is not aware of any charges that are expressly designed to cover whole code activation activities.

However, when ILECs activate partial codes for other carriers, there is often a fee, which goes by a variety of names, as Attachment 1 demonstrates. Typically these fees are associated with DID number-block installation. These include both nonrecurring and recurring charges. As demonstrated above, any charges for number blocks are unreasonably high, relative to costs, particularly so when multiple contiguous blocks are activated. A number of carriers, including Bell Atlantic-NYNEX, Southwestern Bell, GTE, and Sprint do not, to PageNet's knowledge, assess any partial code activation charges.

Finally, Attachment 1 also illustrates the code opening fees that some ILECs continue to charge when PageNet is assigned and activates an NXX code. These, too, include both nonrecurring and recurring charges. As noted earlier, when PageNet receives a new NXX code, *all* carriers in the NPA territory must perform code opening functions, but only the ILECs (in some locations) charge the NXX code assignee. Moreover, there is virtually no ongoing work with code opening. (A number of ILECs, including Bell Atlantic-NYNEX, Southwestern Bell, GTE, and Sprint do not charge NXX code opening fees.) The California PUC last December ordered Pacific Bell, GTE, and other ILECs in the state to stop assessing these code opening fees.[18] As the California PUC noted, the functions that the ILEC and other carriers perform in their switches when another carrier receives an NXX code are simply a normal cost of doing business and should be absorbed by each carrier.[19]

An original and one copy of this letter is being submitted to the Secretary pursuant to the Commission's *ex parte* rules.

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[18] *Order Instituting Rulemaking on the Commission's Own Motion Into Competition for Local Exchange Service*, Decision No. 96-12-067 (CPUC Dec. 20, 1996). Pacific Bell has indicated to PageNet that the charges on the attached table will be removed. This has not yet occurred. Nonetheless, assuming these charges are removed, it is still significant that even after the unambiguous directive from the CPUC, these charges continue to appear, and PageNet must expend resources to closely monitor its bills and haggle the ILEC to have these unlawful charges removed.

[19] *Id.* at 1.

Please contact Judith St. Ledger Roty (202-955-9789) or Chip Yorkgitis (202-955-9668) if you have any questions or require further information.

Respectfully submitted,

Judith St. Ledger-Roty
Edward A. Yorkgitis, Jr.
Attorneys for Paging Network, Inc.

cc: Geraldine Matise
Kent R. Nilsson
Erin Duffy
Renee A. Alexander
Gregory M. Cooke

Representative Number Charges[1][2]

Jurisdiction	NXX Codes		DID Numbers (Partial NXX Codes)(Type 1)	
	Recurring per NXX per mo.	Non-Recurring	Recurring per 100 Numbers per mo.	Non-Recurring Per100 Numbers
Ameritech (Michigan)			$4.00	
Bell South				
Florida	$50.00		$0.50	
Georgia	$50.00		$0.60	
South Carolina (Type I)	$50.00	$8,285.00		
Coastal Utilities (Hinesville, GA)			$50.00	$500.00
Concord Telephone (NC)			$110.00	
U S West				
Washington			$15.00	
Arizona			$15.00	$100.00
Pacific[4]			$0.41	$64.00
818 NXX (2/1/97)(Type 2)	$41.00	$30,600.00		
714 NXX (2/1/97)(Type 2)	$41.00	$27,600.00		
510 NXX (6/14/97)(Type 2)	$41.00	$24,900.00		
Nevada Bell (Type I)	$2833.33[3]	$7825.00[3]	$25.00(1st 100)/$28.33 (add'l 100)	$400.00 (1st 100)/75.00(add'l 100)

(1)This list is representative only. An ILEC's exclusion from the chart does not necessarily mean that the ILEC is not assessing PageNet NXX or DID charges. Similarly, the fact that a charge is not given for a carrier that is listed does not necessarily mean the carrier is not assessing such a charge.

(2) Bell Atlantic-NYNEX, GTE, Southwestern Bell and Sprint no longer assess numbering charges for whole and/or partial NXX codes.

(3) These numbers represent the total charges for 100 blocks of 100 DID numbers each, which together constitute a full NXX code.

(4) Discussions with Pacific Bell have indicated these charges should be removed, but to date they have not been.

This 5 page report was prepared by Paging Network, Inc.
Summary of current paging interconnection as of March 1, 1996.

A. Paging interconnection currently consists of type 1 (End Office), and type 2A (Tandem) connections.
Type 2B (High volume,single end office connection) is not currently economically viable for paging.
Currently, both type 1 and type 2 interconnection use MF trunk signaling over DS-1 facilities almost exclusively.

B. Paging carriers currently do NOT receive compensation for terminating traffic from any local exchange carrier.
In all cases, paging carriers must pay the local exchange carrier to receive calls to paging numbers.

C. Nynex in New York is currently compensating cellular carriers (but NOT paging carriers)
for terminating calls from the local exchange.

D. Nynex, Bell Atlantic, Pacific Bell, US West, GTE, Sprint/MAT, SNET and other independents
will NOT provide the same interconnection to paging carriers as that provided to cellular carriers.

E. All RBOC's offer some form of Type 2A (tandem) interconnection for both local and LATA wide calling.
In most cases, callers are charged the local flat or measured rate for calls to paging numbers.

F. The paging carrier pays a measured usage charge for type 2 calls originating outside the local exchange area.
(And in some cases, within the local exchange area.)

G. Except in New York, paging carriers must pay monthly trunk charges to be able to receive paging call traffic.

H. Paging carriers have to pay the local exchange carrier for activating NXX codes everywhere except New York and the Ameritech states.
NXX charges vary from approximately $2000 to $30,000 for activating each NXX code.

I. GTE, Sprint/MAT and other independent local exchange carriers have proposed or are currently charging paging carriers
a measured rate usage charge as well as trunk and other charges for local exchange calls that are terminated on paging numbers.

J. All local exchange carriers have proposed charges for CCS/SS7 signaling.
These charges are not based on mutual compensation principles and can include data circuits, STP port charges and usage.

K. Paging "dedicated" NXX codes are assigned "for use" by paging carriers but are shown in the Local Exchange Routing Guide (LERG)
as "paging" NXX codes with the Operating Company Number (OCN) of the wireline Local Exchange Company.
The LEC's have also refused to publish routing, rate centers and locality descriptions sought by paging carriers.

L. Bellcore charges a copyright fee for assignment of Common Language Location Identifier (CLLI) codes
needed for establishing a network switch location. In addition, the LEC's and Bellcore have refused to publish in the LERG,
duly assigned CLLI codes of paging switches.

Excerpted from Appendix C of PageNet's Comments
filed March 4, 1996
CC Docket No. 95-185

Paging Network, Inc. 3/01/96			
Prices listed are averages of price ranges taken from published or proposed tariffs and agreements			
	NYNEX	AMERITECH	SOUTHWESTERN BELL
Refer to Notes listed below by number	Notes 1,4,9,10,13	Notes 1,3,5,6,11,12	Notes 1,3
	NY	OH,IL,WI,MI,IN	TX,OK,MO
Type 1 Trunks (DS-1) (0 mi)	0	$125	$100
Type 1 Numbers (100 Block)	0	$8.00	$8.50
Type 2 Trunks (DS-1)(0 mi)	0	$125 (Note 16)	$930
Type 2 Local (Usage/Min)	0	0 (Note 15)	0
Type 2 LATA-wide (Usage/Min)	0	$0.022/min	$0.045/min
SS7 (A link pairs, 10 mi)	Not offered	See note 16	Not offered
SS7 Usage	Not offered	See note 16	Not offered
NXX Code Establishment Charge	No chgs for NXX's	Chgs for NXX's being eliminated	$6400/NXX

Notes:

1. LATA-wide calling is defined as Land-to-Mobile calls from this LEC's end offices only.
2. Currently only Type 1 interconnection is available from this local exchange carrier.
3. Charges are made to the paging carrier for both local and LATA calls delivered to paging carriers.
4. This LEC will NOT offer Paging Carriers the same interconnection terms as Cellular Carriers.
   The Cellular interconnection is more favorable and less costly than that offered to Paging Carriers.
5. This LEC charges callers the local measured rate in additon to charging the paging carrier the Type 2 measured rate.
6. Interconnection negotiations for revised paging interconnection are currently underway with this LEC.
7. Trunk connections to both a "local" tandem and a "toll" tandem required.
8. Callers are not charged any local measured rate for Type 2 calls
9. This LEC charges callers the local measured rate for all type 2 calls delivered to paging carriers.
10. There is no charge to the paging carrier for type 2 trunks.
11. Billing option 1 charges the paging carrier the land-to-mobile access rate. (approx. $0.045/minute)
12. Billing option 2 charges the caller the local measured rate for paging calls.
13. Compensation of $0.0259/minute is paid for cellular land-to-mobile calls. This compensation is not available to paging carriers.
14. This LEC is demanding that new interconnection agreements include charges to the paging carrier
    for both local and LATA calls delivered to paging carriers.
15. Ameritech has proposed paying the access terminating switching rate (approx. $006/min) for all calls terminated to CMRS carriers.
16. Ameritech has proposed delivering all local exchange traffic to CMRS carriers at no charge to the CMRS carrier.

Paging Network, Inc. 3/01/96			
Prices listed are averages of price ranges taken from published or proposed tariffs and agreements			
	BELLSOUTH	US WEST	PACIFIC BELL
Refer to Notes listed below by number	Notes 1,3,8	Notes 1,3,4,7	Notes 1,3,4,5,6
	FL,NC,SC,GA,LA,AL	AZ,OR,WA,MN,CO	CA
Type 1 Trunks (DS-1) (0 mi)	$500	$375	$250
Type 1 Numbers (100 Block)	$0.50	$15	$0.50
Type 2 Trunks (DS-1)(0 mi)	$500	$375	$250
Type 2 Local (Usage/Min)	0	0	$0.01/call
Type 2 LATA-wide (Usage/Min)	$0.077/min	$0.09/min	$0.01/call
SS7 (A link pairs, 10 mi)	$934	Not offered	Not offered
SS7 Usage	$500	Not offered	Not offered
NXX Code Establishment Charge	$2900/NXX	$8700/NXX	$15,000 to $30,500/NXX

Notes:

1. LATA-wide calling is defined as Land-to-Mobile calls from this LEC's end offices only.
2. Currently only Type 1 interconnection is available from this local exchange carrier.
3. Charges are made to the paging carrier for both local and LATA calls delivered to paging carriers.
4. This LEC will NOT offer Paging Carriers the same interconnection terms as Cellular Carriers. The Cellular interconnection is more favorable and less costly than that offered to Paging Carriers.
5. This LEC charges callers the local measured rate in additon to charging the paging carrier the Type 2 measured rate.
6. Interconnection negotiations for revised paging interconnection are currently underway with this LEC.
7. Trunk connections to both a "local" tandem and a "toll" tandem required.
8. Callers are not charged any local measured rate for Type 2 calls
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10. There is no charge to the paging carrier for type 2 trunks.
11. Billing option 1 charges the paging carrier the land-to-mobile access rate. (approx. $0.045/minute)
12. Billing option 2 charges the caller the local measured rate for paging calls.
13. Compensation of $0.0259/minute is paid for cellular land-to-mobile calls. This compensation is not available to paging carriers.
14. This LEC is demanding that new interconnection agreements include charges to the paging carrier for both local and LATA calls delivered to paging carriers.
15. Ameritech has proposed paying the access terminating switching rate (approx. $006/min) for all calls terminated to CMRS carriers.
16. Ameritech has proposed delivering all local exchange traffic to CMRS carriers at no charge to the CMRS carrier.

Paging Network, Inc. 3/01/96			
Prices listed are averages of price ranges taken from published or proposed tariffs and agreements			
	BELL ATLANTIC	NET	SNET
Refer to Notes listed below by number	Notes 1,3,4,5,6	Notes 1,4,9	Notes 1,3,4,6,7
	MD,VA,PA,WV,NJ	MA	CN
Type 1 Trunks (DS-1) (0 mi)	$125	$150	$150
Type 1 Numbers (100 Block)	$14.00	Not listed	$52.00
Type 2 Trunks (DS-1)(0 mi)	$125	$150	$150
Type 2 Local (Usage/Min)	$0.00	$0.002/min	$0.0142/min for both type 1 and type 2
Type 2 LATA-wide (Usage/Min)	$0.01/Call + $0.012/min	$0.002/min	$0.06/min
SS7 (A link pairs, 10 mi)	Rate not specified	Not offered	Not offered
SS7 Usage	Rate not specified	Not offered	Not offered
NXX Code Establishment Charge	$4500/NXX	$6,000	$5,000

Notes:

1. LATA-wide calling is defined as Land-to-Mobile calls from this LEC's end offices only.
2. Currently only Type 1 interconnection is available from this local exchange carrier.
3. Charges are made to the paging carrier for both local and LATA calls delivered to paging carriers.
4. This LEC will NOT offer Paging Carriers the same interconnection terms as Cellular Carriers.
   The Cellular interconnection is more favorable and less costly than that offered to Paging Carriers.
5. This LEC charges callers the local measured rate in additon to charging the paging carrier the Type 2 measured rate
6. Interconnection negotiations for revised paging interconnection are currently underway with this LEC.
7. Trunk connections to both a "local" tandem and a "toll" tandem required.
8. Callers are not charged any local measured rate for Type 2 calls
9. This LEC charges callers the local measured rate for all type 2 calls delivered to paging carriers.
10. There is no charge to the paging carrier for type 2 trunks.
11. Billing option 1 charges the paging carrier the land-to-mobile access rate. (approx. $0.045/minute)
12. Billing option 2 charges the caller the local measured rate for paging calls.
13. Compensation of $0.0259/minute is paid for cellular land-to-mobile calls. This compensation is not available to paging carriers.
14. This LEC is demanding that new interconnection agreements include charges to the paging carrier
    for both local and LATA calls delivered to paging carriers.
15. Ameritech has proposed paying the access terminating switching rate (approx. $006/min) for all calls terminated to CMRS carriers.
16. Ameritech has proposed delivering all local exchange traffic to CMRS carriers at no charge to the CMRS carrier.

Paging Network, Inc. 3/01/96			
Prices listed are averages of price ranges taken from published or proposed tariffs and agreements			
	GTE	SPRINT/MID ATLANTIC TELECOMM	SPRINT/CENTEL
Refer to Notes listed below by number	Notes 1,3,4,6,14	Notes 1,2,3,4,6,14	Notes 1,2,4
	CA,FL,OH,OR,WA	NC	NV
Type 1 Trunks (DS-1) (0 mi)	$125	$150	$125
Type 1 Numbers (100 Block)	$13.00	$24.00	$24.00
Type 2 Trunks (DS-1)(0 mi)	$125	$150	Not offered
Type 2 Local (Usage/Min)	$0.005/min	0	Not offered
Type 2 LATA-wide (Usage/Min)	$0.035/min	$0 12/min	Not offered
SS7 (A link pairs, 10 mi)	Rate not specified	Not offered	Not offered
SS7 Usage	Rate not specified	Not offered	Not offered
NXX Code Establishment Charge	$4,600	$2,680	$2,680

Notes:

1. LATA-wide calling is defined as Land-to-Mobile calls from this LEC's end offices only.
2. Currently only Type 1 interconnection is available from this local exchange carrier.
3. Charges are made to the paging carrier for both local and LATA calls delivered to paging carriers.
4. This LEC will NOT offer Paging Carriers the same interconnection terms as Cellular Carriers.
   The Cellular interconnection is more favorable and less costly than that offered to Paging Carriers.
5. This LEC charges callers the local measured rate in additon to charging the paging carrier the Type 2 measured rate.
6. Interconnection negotiations for revised paging interconnection are currently underway with this LEC.
7. Trunk connections to both a "local" tandem and a "toll" tandem required.
8. Callers are not charged any local measured rate for Type 2 calls
9. This LEC charges callers the local measured rate for all type 2 calls delivered to paging carriers.
10. There is no charge to the paging carrier for type 2 trunks.
11. Billing option 1 charges the paging carrier the land-to-mobile access rate. (approx. $0 045/minute)
12. Billing option 2 charges the caller the local measured rate for paging calls.
13. Compensation of $0.0259/minute is paid for cellular land-to-mobile calls. This compensation is not available to paging carriers.
14. This LEC is demanding that new interconnection agreements include charges to the paging carrier for both local and LATA calls delivered to paging carriers.
15. Ameritech has proposed paying the access terminating switching rate (approx. $006/min) for all calls terminated to CMRS carriers.
16. Ameritech has proposed delivering all local exchange traffic to CMRS carriers at no charge to the CMRS carrier.